

## PORTABLE EXERCISER

The present invention pertains to the art of exercising equipment and more specifically, to a portable unit which can be used by an individual to perform various exercises.

Physical fitness of individuals has continued to become an important component of a person's health. Medical studies continue to show that an individual that exercises regularly can enhance his or her longevity and/or reduce incidents of heart disease, respiratory problems, diabetes, and/or other types of diseases. Individuals that are continuously on the road due to their jobs (e.g. salesmen, executives, truck drivers, airline pilots and flight attendants, etc.) are frequently away from home for extended periods of time, thus have difficulty in maintaining a daily exercise schedule. As such, it is not uncommon that such individuals do not regularly exercise, or begin an exercise program and soon thereafter give the program up due to the difficulty in maintaining the exercise program.

In view of the problems associated with maintaining an exercise program for individuals that frequently travel, there is a need for an exercise unit that is portable and which can be easily and conveniently used by an individual away from home to enable the individual to exercise while such individual is traveling.

The present invention is directed to a portable exerciser which addresses the needs of individuals that frequently travel. More particularly, the portable exerciser is designed to be made in a convenient form so that a traveler can easily pack such a device and transport such a device when traveling on the road. The portable exerciser can not only be used by individuals that frequently travel, but also for individuals that periodically travel for business, vacationers, and the like.

The portable exerciser is designed to allow individuals to exercise their upper and/or lower body areas. As such, the portable exerciser can be used as the principal exercising device for the individual, or be used as a supplement for the individual in combination with other exercising devices and/or exercise routines (i.e. push-ups, sit-ups, crunches, stretching exercises, etc.).

5           One non-limiting embodiment of the invention is disclosed in FIGURES 1-3. FIGURE 1 illustrates a portable exerciser that includes a collapsible mat formed of two primary components which are connected together. These components can be connected together in a variety of ways such as, but not limited to, mechanical hinges, straps, Velcro, flexible materials, etc. The two components are designed to form the collapsible mat and be oriented to allow an individual to place  
10           his or her head, back, and buttocks on the mat. As such, the two components provide comfort to the individual during the exercise routines when using the portable exerciser. The collapsibility of the two components of the mat enables the portable exerciser to be reduced in size for easy packing, carrying, and/or transporting.

As shown in FIGURE 1, the two components of the mat of the portable exerciser include a  
15           compressible material to provide comfort to the user. Such compressible materials include, but are not limited to, foam, rubber, gels, air pockets, foams, blown polymers, and/or the like. The two components of the mat also include a durable surface which resists wear by the user during the use of the portable exerciser. Such materials can include, but are not limited to, vinyl, leather, nylon, Kevlar blends, and the like.

20           As illustrated in FIGURE 2, the back of each of the mats includes a relatively rigid structure wherein various components can be rigidly connected to each of the two components of the mat.

The relatively rigid structure can include materials such as, but not limited to, metal, wood, fiberglass, hard rubber, plastic, composite materials, etc. The compressible material is typically connected to the relatively rigid material by, but not limited to, adhesives, rivets, nails, staples, thread, snaps, Velcro, tacks, etc. As can be appreciated, the compressible material can include a durable surface, thus be a single component.

The two components of the mats are shown to have substantially the same shape and surface; however, this is not required. As shown in FIGURE 1, both components have a substantially straight back surface where the components are connected together. The two components also have two substantially straight side surfaces. The front surfaces of each component have two rounded corners. As can be appreciated, many other configurations can be used. As can also be appreciated, many color schemes for the components of the mat, and/or textures of the components of the mat, can be used. As shown in FIGURE 1, each component of the mat has a maximum width of about 1.5-3 feet. As can be appreciated, other dimensions can be used. The thickness of each component of the mat is illustrated as being substantially the same and having a thickness of about 0.5-4 inches; however, other thicknesses can be used.

As shown in FIGURE 2, a bar support system is connected to each of the two components of the mat to enable the components to be positioned in an angular relationship to one another. As shown in FIGURE 3, the angular relationship of the components is about  $180^\circ$  for the components to be essentially in a flat position. As shown in FIGURE 1, the components are oriented in about  $90^\circ$  wherein one component is flat against the floor and the other component is positioned substantially perpendicular to the floor as illustrated in FIGURE 2. FIGURE 1 illustrates the two

components of the mat oriented at some angle between 90° and 180°. As shown in FIGURE 2, there can be multiple position settings for the bars to enable a user to orient two mats with respect to one another to obtain the desired position for an exercise and/or the desired comfort level during the use of the portable exerciser. As shown in FIGURE 2, the bars which are connected to the two components of the mat are made of a metal material; however, other materials can be used. As can further be appreciated, many different mechanisms can be used to orient the two components from 0° to 360° with respect to one another.

As illustrated in FIGURES 1 and 3, exercise handles are detachably connected to both of the components of the mat. These exercise handles are connected to a stretchable material such as rubber, elastic, or the like, which is designed to resist being stretched by a user during an exercise routine. As shown in FIGURE 1, two exercise handles are connected to stretchable bands which in turn are connected to the components of the mat. As shown in FIGURES 2 and 3, removable pins are used to detachable connect the stretchable bands to each component of the collapsible mat. As can be appreciated, other connection arrangements can be used. Although FIGURE 1 illustrates the exercise handles and their respective stretchable bands being connected to both of the components of the mat, it can be appreciated that during a particular exercise routine, one or both handles can be connected to one component of the mat and only one or none of the handles and stretchable bands can be connected to the other component of the mat. As such, the portable exerciser can have increased flexibility in how it can be configured for particular exercises. As can be appreciated, when an individual sits his or herself in the portable exerciser as it is oriented in FIGURES 1-3, the handles and stretchable bands that are attached to the portion where the individual sits can be used

by the individual's legs to provide exercising routines to build up the legs and lower body, whereas the handles and stretchable bands that are connected to the mat to which the upper portion of the individual is laying against can be used to build up the arms and upper body of the individual.

As can be appreciated, the degree of flexibility or the ease of stretching of the stretchable bands can be adjusted by substituting one band for other bands. In this particular arrangement, each handle can be easily detached from a particular stretchable band and the handle can then be reattached to a different type of stretchable band having a different tension. As such, a user can select a particular tension for the stretchable band to obtain the desired degree of difficulty when using the portable exerciser during a particular exercise.

Although not shown in FIGURES 1-3, the portable exerciser can be packaged in a convenient holder so that it can be easily transported by a user. The holder can be designed to contain multiple sets of stretchable bands and/or other exercising accessories.

While considerable emphasis has been placed hereon on preferred embodiments of the invention, it will be appreciated that other embodiments can be devised and that many changes can be made in the preferred embodiment described above without departing from the principles of the invention. Accordingly, it is to be distinctly understood that the foregoing descriptive matter is to be interpreted merely as illustrative of the invention and not as a limitation.